

What is claimed is:

1. An inorganic particles-containing additive composition containing a polyvalent metal, a phosphoric acid ion, an organic acid having a carboxyl group and an alkali metal, which satisfies the following requirements of (a) and (b):

$$(a) 70 \leq x \leq 90000$$

X: Amount (mg/Kg) of the alkali metal contained in a solid content of the inorganic particles-containing additive composition,

$$(b) 0.1 \leq y \leq 15$$

Y: Electric conductivity (mS/cm) when the inorganic particles-containing additive composition is adjusted to a solid concentration of 10 % by weight.

2. An inorganic particles-containing additive composition containing a polyvalent metal, a phosphoric acid ion, an organic acid having a carboxyl group and an alkali metal, which satisfies the following requirements of (c) and (d):

$$(c) 70 \leq x \leq 39000$$

X: Amount (mg/Kg) of the alkali metal contained in a solid content of the inorganic particles-containing additive composition,

$$(d) 0.1 \leq y \leq 7$$

Y: Electric conductivity (mS/cm) when the inorganic

Japonese Patent

particles-containing additive composition is adjusted to a solid concentration of 10 % by weight.

3. An inorganic particles-containing additive composition containing a polyvalent metal, a phosphoric acid ion, an organic acid having a carboxyl group and an alkali metal, which satisfies the following requirements of (e) and (f):

$$(e) \quad 150 \leq x \leq 10000$$

X: Amount (mg/Kg) of the alkali metal contained in a solid content of the inorganic particles-containing additive composition.

$$(f) \quad 0.25 \leq y \leq 1.8$$

Y: Electric conductivity (mS/cm) when the inorganic particles-containing additive composition is adjusted to a solid concentration of 10 % by weight.

4. An inorganic particles-containing additive composition containing as a main component at least one of phosphoric acid compounds selected from the group consisting of calcium phosphate, magnesium phosphate and iron phosphate, which comprises a polyvalent metal, a phosphoric acid ion, an organic acid having a carboxyl group and an alkali metal, which is prepared by a method selected from the following (I) to (IV), said additive composition satisfying the following requirements of (a) and (b):

(I) A precursor is prepared by mixing water, a polyvalent

metal compound, an organic acid having a carboxyl group and an alkali metal source, and to the precursor, a phosphoric acid source is added.

(II) A precursor is prepared by mixing water, a polyvalent metal compound, a phosphoric acid source and an alkali metal source, or, a phosphoric acid source · alkali metal source, and to the precursor, an organic acid having a carboxyl group is added.

(III) A precursor is prepared by mixing water, a polyvalent metal compound and an organic acid having a carboxyl group, and to the precursor, a phosphoric acid source · alkali metal source is added.

(IV) A precursor is prepared by mixing water, a polyvalent metal compound, an organic acid having a carboxyl group and a phosphoric acid source, and to the precursor, an alkali metal source is added.

$$(a) \quad 70 \leq X \leq 90000$$

X: Amount (mg/Kg) of the alkali metal contained in a solid content of the inorganic particles-containing additive composition,

$$(b) \quad 0.1 \leq Y \leq 15$$

Y: Electric conductivity (mS/cm) when the inorganic particles-containing additive composition is adjusted to a solid concentration of 10 % by weight.

5. An inorganic particles-containing additive

composition further containing 2 to 80 parts by weight of an emulsification stabilizer to 100 parts by weight of a solid content of the inorganic particles-containing additive composition according to any one of claims 1-4.

6. An inorganic particles-containing additive composition according to any one of claims 1 to 4, wherein a weight-average diameter K (μm) is $0.02 \leq k \leq 0.8$.

7. An inorganic particles-containing additive composition according to any one of claims 1 to 4, in use for foods.

8. A method for manufacturing inorganic particles-containing additive composition, comprising the steps of:

preparing a slurry containing at least one phosphoric acid compound as a main component, which comprises a polyvalent metal, a phosphoric acid ion, an organic acid having a carboxyl group, and an alkali metal, by a method selected from the following (I) to (IV), and

washing the resultant slurry:

(I) A precursor is prepared by mixing water, a polyvalent metal compound, an organic acid having a carboxyl group and an alkali metal source, and to the precursor, a phosphoric acid source is added.

(II) A precursor is prepared by mixing water, a polyvalent metal compound, a phosphoric acid source and a alkali metal source, or, a phosphoric acid source · alkali metal source,

and to the precursor, an organic acid having a carboxyl group is added.

(III) A precursor is prepared by mixing water, a polyvalent metal compound and an organic acid having a carboxyl group, and to the precursor, a phosphoric acid source · alkali metal source is added.

(IV) A precursor is prepared by mixing water, a polyvalent metal compound, an organic acid having a carboxyl group and a phosphoric acid source, and to the precursor, an alkali metal source is added.

9. A method for manufacturing inorganic particles-containing additive composition, wherein 2 to 80 parts by weight of an emulsification stabilizer are contained in 100 parts by weight of the inorganic particles-containing additive composition prepared by the method according to claim 8.

10. A method for manufacturing inorganic particles-containing additive composition according to claim 9, wherein after the emulsification stabilizer is contained in the inorganic particles-containing additive composition, the resultant additive composition is dispersed by a grinding machine and/or a dispersing machine.

11. A food composition containing the inorganic particles-containing additive composition according to any one of claims 1 to 4.

12. A food composition containing the inorganic
particles-containing additive composition according to claim
5.